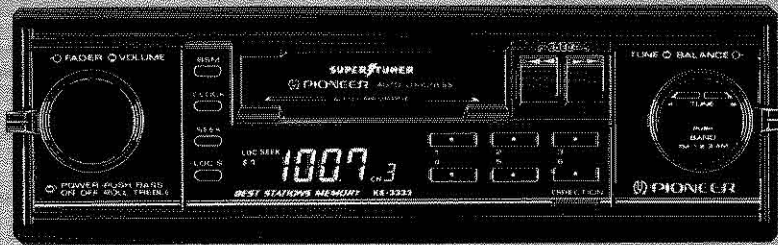


SUPER TUNER

OWNER'S MANUAL

شكروا لك على شرائك جهاز بايوتير هذا. قبل محاولة تشغيله تأكد من قراءة هذا الدليل.



KE333



PIONEER

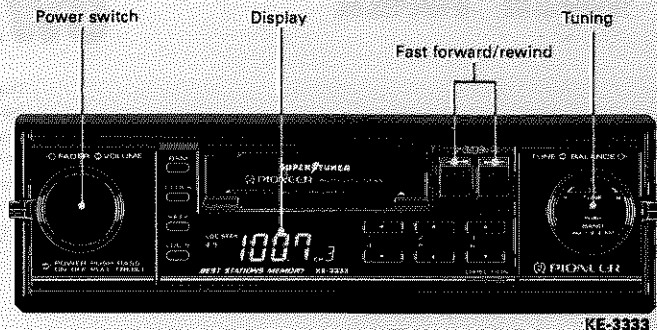
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Features

- Built-in highly sensitive "Super Tuner" for automatic control of stereo separation, muting and frequency characteristics to match the strength of the FM signal.
- The Best Stations Memory automatically memorizes the six best (strongest) stations in the six preset buttons in the order of their strength.
- Preset tuning function for frequency selection at the touch of a button.
- For AM reception, a tuning step is switchable to the other according to the zonal frequency range.
- Auto reverse function eliminates the need to turn the cassette over and allows uninterrupted playback.
- Built-in 12-hour format digital clock.
- 4-speaker system creates a full-bodied listening environment.

(This feature is provided for the KE-3333.)

Switching the Tuning Steps



KE-3333

• Changing the tuning step

The tuning steps of the AM band for this unit can be switched between 10 kHz and 9 kHz per step. The tuning step should be switched from 10 kHz (which is preset at the factory) to 9 kHz when this unit is used in Europe, Asia, the Middle and Near East, Africa, Australia and Oceania.

1. Simultaneously press the fast forward and rewind buttons to eject the cassette, and then turn left the power switch to turn power off.
 2. The AM band tuning step is changed by turning power on (turn right the power switch) while holding the tuning knob turned left or right. It should be noted that changing the tuning step also deletes frequencies stored in the tuning memories.
- Changing the vehicle's battery sets the tuning steps and frequency range settings to their initial setting.

Specification		Initial Setting	New Setting
AM	Tuning steps	10 kHz steps	9 kHz steps
	Frequency range	530 — 1,620 kHz	531 — 1,602 kHz

Connections

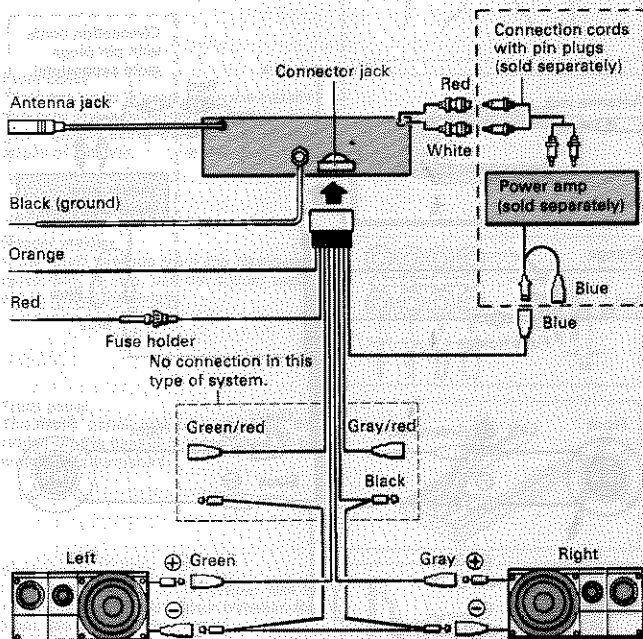
Note:

- To avoid shorts in the electrical system, be sure to disconnect the battery \ominus cable before beginning installation.
- Replace fuses only with the types stipulated on the fuse holder.
- Be sure to properly connect the color coded leads. Failure to do so can cause malfunctions.
- Cover unused terminals with tape to prevent electrical shorts. (KE-3333)
- Refer to the power amp owner's manual when connecting a power amp (sold separately) to the pin jack. (KE-3333)

Black (ground)	To vehicle (metal) body.
Blue	System control/Auto-antenna relay control terminal (Max. 300 mA 12 V DC).
Orange	To terminal always supplied with power regardless of ignition switch position.
Red	To electric terminal controlled by ignition switch (12 V DC) ON/OFF.

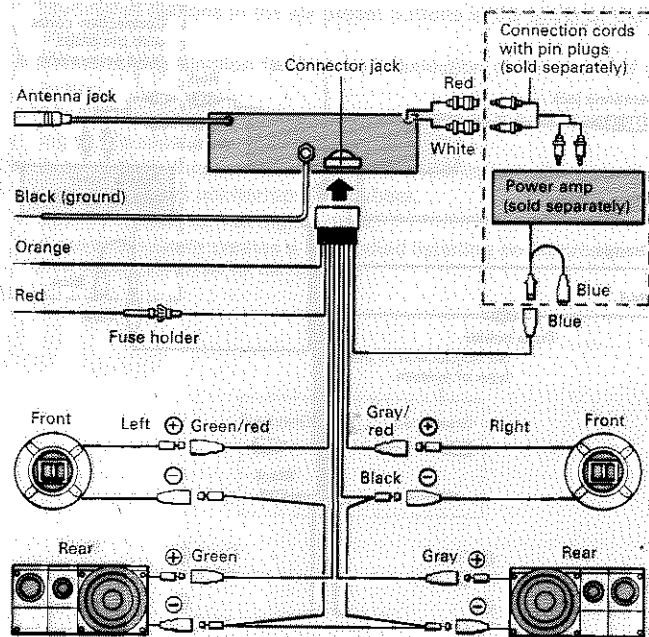
KE-3333

2-speaker system

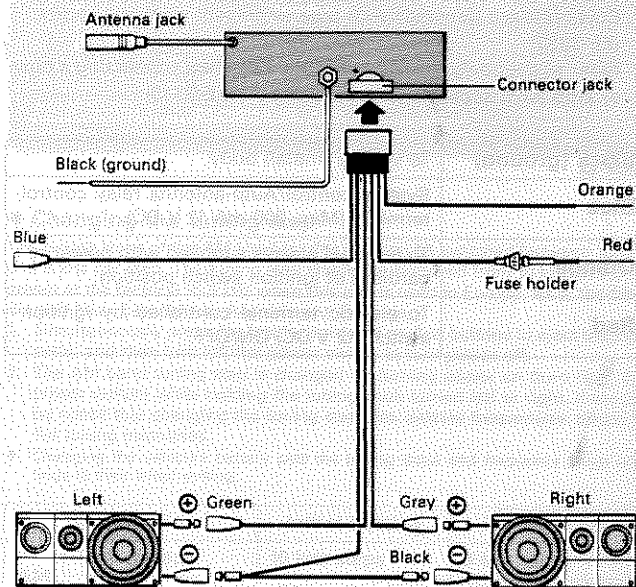


KE-3333

4-speaker system



KE-2323



Installation

Note:

- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance. (Fig. 1)

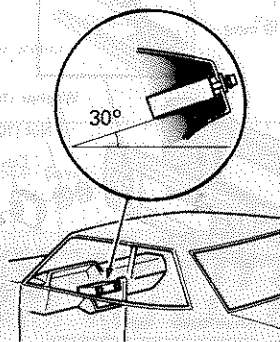
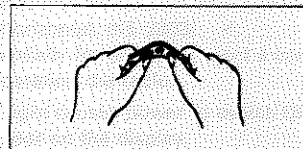


Fig. 1

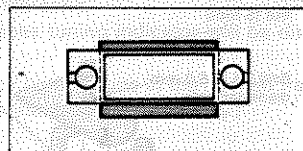
Strap

Be sure to use the strap to secure the back of the unit in place to prevent wobble and flutter. The strap can be bent by hand to the desired angle.



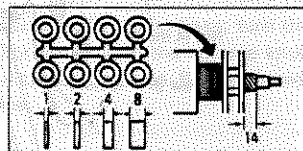
Front cover

The front cover is used when the installation hole in the dashboard is so large that gaps appear along the top and bottom edges of the unit.



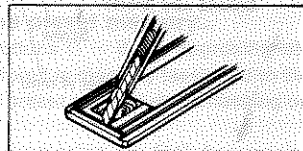
Spacer washer

If the shaft extends from the dashboard more than 14 mm, use the spacer washers to adjust the length.



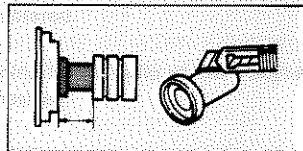
Front panel

The front panel can be cut along the ridges on the back if it is too large to be installed as furnished.



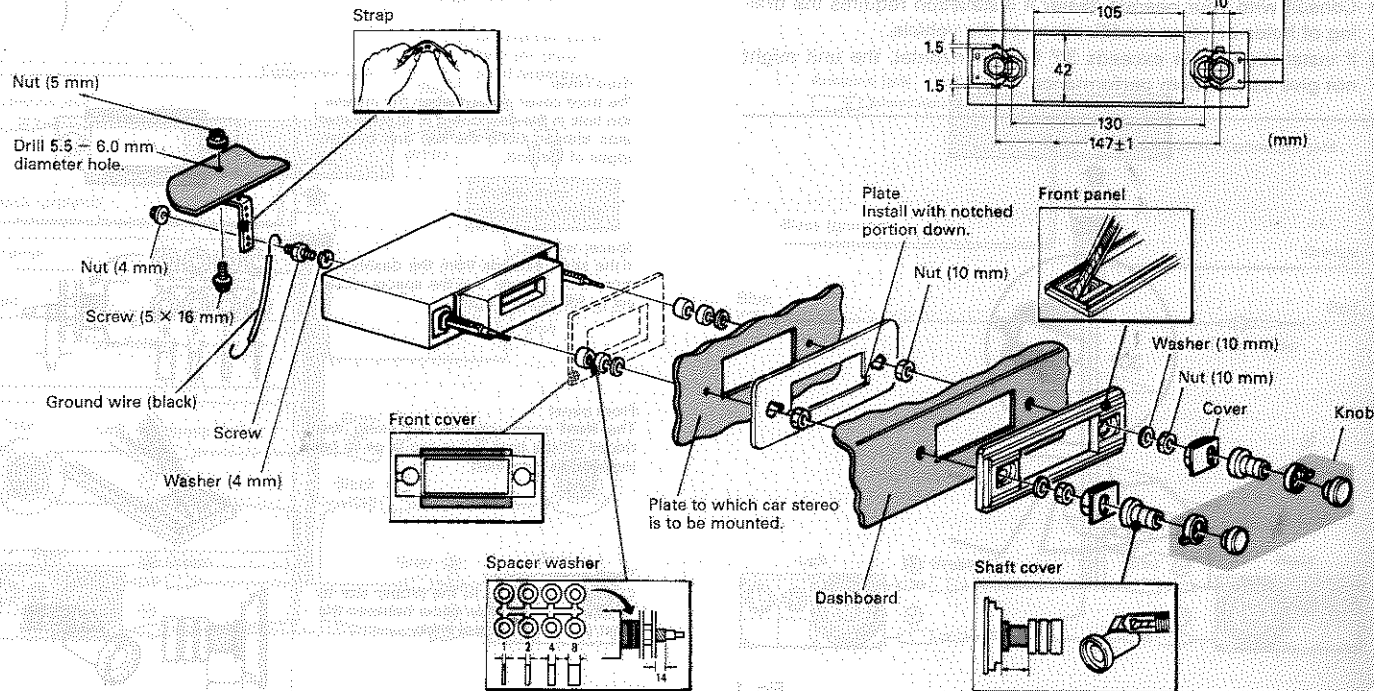
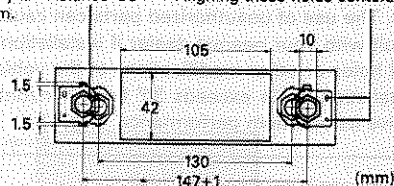
Shaft cover

Cut the shaft cover to the proper size to fill any gap which may occur between the front panel and control knob.

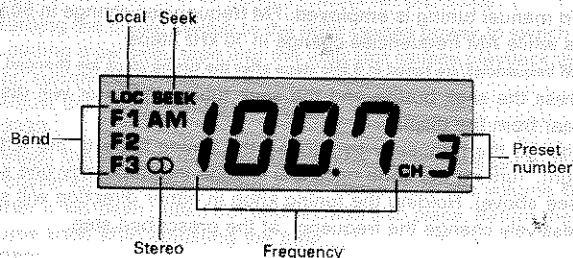
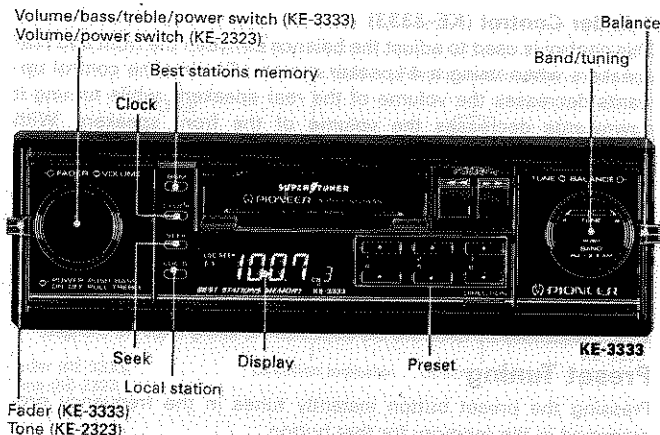


● Adjusting the shaft interval

Loosen this nut to adjust distance between shafts to 130 mm. Aligning these holes centers the shaft.



Using the Radio



Before attempting operation...

- Set the fader control to the left horizontal. (KE-3333)
- Since the set is designed preferentially for tape play, eject a cassette tape, if mounted, before operating the radio.

- Turning the power switch to the right causes power to switch ON and the current frequency to appear on the display.
- Press the band switch to select the band.
- Press the seek button and the seek tuning indicator will be displayed.
- Turn the tuning knob to the left or right to tune in the desired frequency. (Turning to the right will increase the frequency.)
- Adjust the volume and balance.

KE-3333

- Adjust the tone to the desired position. To adjust bass, turn the volume knob while pressing it. For treble, turn the volume knob after it has been pulled out until it clicks into place. Return the volume knob after adjusting the tone.

KE-2323

- Adjust the tone.

To enter a frequency into the preset memory...

- Hold down one of the preset buttons (1 — 6) for approximately two seconds. The frequency is stored in memory (assigned to the preset button pressed) once the preset number stops flashing on the display.

Six FM1 frequencies, six FM2 frequencies, six FM3 frequencies and six AM frequencies can be entered.

Auto-Loudness

When playing back a tape or listening to the radio at low volume, the low tone is automatically emphasized.

Clock Switch

Each press causes the display to switch between clock and frequency.

● Best Stations Memory Button

Automatically tunes strong frequencies and assigns them to preset buttons 1 through 6 for one-touch automatic tuning. The best stations memory function is activated by pressing this button for approximately 2 seconds. The best stations memory function is indicated by — flashing on the display, and this function can be canceled by pressing the band switch. Once frequencies have been assigned to the preset buttons, each one is tuned in and played for eight seconds. Finally the frequency assigned to preset button 1 is tuned in to complete the procedure.

- 6 best (strongest) frequencies are memorized in the 6 preset buttons in the order of their strength, the strongest one being assigned to preset button 1.
- The frequencies previously assigned to the preset buttons are retained when 6 frequencies cannot be located.
- The best stations memory is in operation while — is flashing on the display.

● Local Station Switch

Pressing this switch increases the seek threshold level so that only relatively strong stations can be tuned in (local indicator will illuminate on the display). Local seek threshold level can be selected among four levels for FM and two levels for AM.

Holding this switch down for approximately 2 seconds and then turning the tuning knob to the right changes the display from L-1, L-2, L-3 to L-4. Turning the tuning knob to the left changes the display from L-4, L-3, L-2 to L-1 (L-1 and L-2 for AM.) The bigger the number, the higher the seek threshold becomes and only relatively strong stations can be tuned in.

● Fader Control (KE-3333)

This control is used to adjust the balance between the front and rear speakers when using a 4-speaker system. Turning the control upwards decreases the volume of the rear speakers, while turning it downwards decreases the volume of the front speakers. With 2-speaker systems, set this control to a horizontal position.

Seek Tuning

Press the seek button, and tuning to the next higher or lower broadcast on the band can be accomplished automatically by simply turning the tuning knob to the left or right. FM frequencies change in 50 kHz steps while those in the AM band change in 10 kHz steps.

- AM frequencies are tuned in 9 kHz steps after the tuning steps are changed.

Preset Tuning

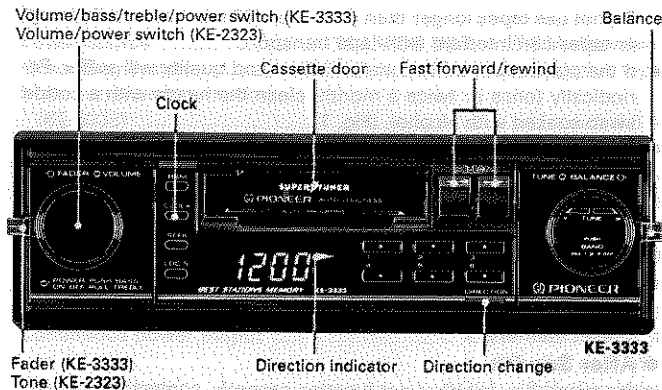
Pressing the preset button instantly tunes in the frequency programmed in the memory for that button.

Manual Tuning

When manual tuning is employed, FM frequencies change in 50 kHz steps while AM frequencies change in 10 kHz steps.

- AM frequencies are tuned in 9 kHz steps after the tuning steps are changed.
1. Press the seek button and the seek tuning indicator will disappear from the display.
 2. Change the frequency by turning the tuning knob to the left or right. Turning the knob once will change the frequency one step (see above). Holding the tuning knob in either direction will successively change the frequency at the prescribed step.

Using the Tape Deck



• Before attempting operation...

- Set the fader control to the left horizontal. (KE-3333)

1. Turning the power switch to the right causes power to switch ON.
2. Loading a cassette tape into the load slot causes playback to begin automatically.

3. Adjust the volume and balance.

KE-3333

4. Adjust the tone to the desired position. To adjust bass, turn the volume knob while pressing it. For treble, turn the volume knob after it has been pulled out until it clicks into place. Return the volume knob after adjusting the tone.

KE-2323

4. Adjust the tone.

5. When tape playback reaches the end of the tape, playback will automatically switch from the side being played to the opposite side (ie. Side A to Side B or vice versa) (Auto-reverse). To eject the tape during playback, simultaneously press the fast forward and rewind buttons.

- A loose or warped label on a cassette tape may interfere with the eject mechanism of the unit or cause the cassette to become jammed in the unit. Avoid using such tapes or remove such labels from the cassette before attempting use.
- Do not try to eject the cassette immediately after insertion, as it will cause malfunction. Wait a few seconds.
- Be sure to eject the tape when the vehicle's ignition is turned OFF. Leaving the tape in the unit can deform the pinch roller causing wow and flutter during tape playback.

• Fast Forward/Rewind

Since the transport can be in either direction, both the left and right high-speed tape transport buttons can be regarded as fast forward/rewind buttons.

For fast forward, press the high-speed tape transport button that corresponds to the direction that is shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the opposite side of the tape (Auto-reverse).

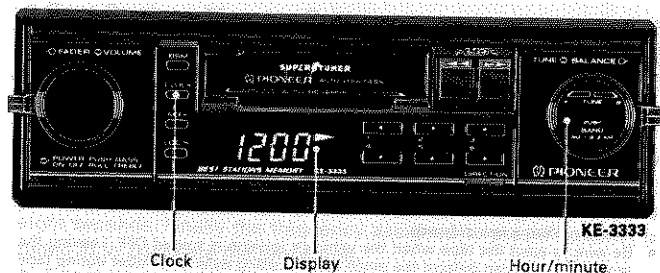
For rewind, press the button that is opposite that of the direction shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the beginning of the same side of the tape (Auto-replay).

Fast forward and rewind can be terminated by pressing the respective opposite high-speed tape transport button.

• Direction Change Button

This button is used to switch from one side of the tape to the other (from Side A to Side B or vice versa).

Setting the Time



1. Press the clock switch to switch to the time display.
2. Each turn of the hour/minute control knob to the left while the clock button is depressed advances the hour setting one hour, while each turn to the right advances the minute setting one minute. Holding the control knob in either position results in high speed advance of the respective setting.

Care and Maintenance

- Do not use tapes longer than C-90-type (90 min.) cassettes. Longer tapes can interfere with tape transport.
- If the playback head becomes dirty, sound quality will suffer. Periodically (once or twice a month) clean the heads with a cotton swab soaked with alcohol. (Fig. 1)
- Storing cassettes in areas directly exposed to sunlight or high temperatures can distort them and subsequently interfere with tape transport. (Fig. 2)
- Store unused tapes in a tape case where there is no danger of them becoming loose or being exposed to dust.
- Frequencies and times stored in memory can be lost when the vehicle's battery is replaced. If this should occur, reprogram the preset memory.
- **After Service**

In the event this unit does not function properly, contact your dealer or the nearest authorized PIONEER Service Center.

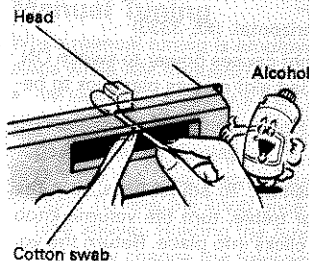


Fig. 1



Fig. 2

Specifications

General

Power source	14.4 V DC (10.8 — 15.6 V allowable)
Grounding system	Negative type
Max. current consumption	
(KE-3333)	2.5 A
(KE-2323)	1.8 A
Dimensions (chassis)	170(W) × 50(H) × 130(D) mm
(nose)	105(W) × 42(H) × 36(D) mm
Shaft interval	130 or 147 mm
Weight	1.3 kg

Amplifier (KE-3333)

Maximum power output	8.5 W × 2/7 W × 4 (EIAJ)
Continuous power output	4.5 W × 2/3.5 W × 4
	(1% dist. at 1 kHz)
Load impedance	4 Ω (4 — 8 Ω allowable)
Preout output level/impedance	500 mV/100 Ω
Tone controls (bass)	±10 dB (100 Hz)
(treble)	±10 dB (10 kHz)
Loudness contour	+8 dB (100 Hz) (volume: -30 dB)

Amplifier (KE-2323)

Maximum power output	8.5 W × 2 (EIAJ)
Continuous power output	4.5 W × 2
	(1% dist. at 1 kHz)
Load impedance	4 Ω (2 — 8 Ω allowable)
Loudness contour	+8 dB (100 Hz) (volume: -30 dB)

Tape player

Tape	Compact cassette tape (C-30 — C-90)
Tape speed	4.8 cm/sec. (1-7/8 ips.)
Fast forward/rewind time	Approx. 100 sec. for C-60
Wow & flutter	0.13% (WRMS)
Frequency response	50 — 14,000 Hz (±3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	52 dB (IEC-A network)

FM tuner

Frequency range	87.5 — 108 MHz
Usable sensitivity	12 dBf (1.1 μV/75 Ω, mono)
50 dB quieting sensitivity	17 dBf (1.9 μV/75 Ω, mono)
Signal-to-noise ratio	70 dB (IEC-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	50 — 15,000 Hz (±3 dB)
Stereo separation	35 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range (10 kHz channel step)	530 — 1,620 kHz
(9 kHz channel step)	531 — 1,602 kHz
Usable sensitivity	18 μV (25 dB) (S/N: 20 dB)
Selectivity	50 dB (±9 kHz)

Note:

Specifications and the design are subject to possible modification without notice due to improvements.

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